

**What is claimed is:**

1. A method for approving electronic payment in an electronic shopping mall with the use of a purchaser mobile terminal, conducted by a mobile communication  
5 service provider server that operates a mobile communication subscriber database and a payment approving server that is associated with an electronic shopping mall server through a communication network and supports WAP service, the method comprising:
  - (a) receiving product transaction information including product information and price information of a product to be purchased together with a mobile terminal number  
10 of the purchaser and an authentication code for identifying the purchaser from a purchaser terminal that accesses the electronic shopping mall server;
  - (b) requesting payment certification with transmitting payment certification information including the mobile terminal number and the purchaser-identifying authentication code to the mobile communication service provider server, and then  
15 waiting for a response;
  - (c) transmitting SMS (Short Message Service) including URL callback for linking WAP access of the payment approving server to the purchaser mobile terminal through the mobile communication service provider server when the mobile communication service provider server transmits a certification success code as a result  
20 of inquiring the mobile communication subscriber database with the use of the payment certification information; and
  - (d) approving the payment under the condition that a mobile terminal transmitted in connection to WAP is identical to the mobile terminal number received in the

electronic shopping mall server when the purchaser mobile terminal accesses WAP with the use of the URL callback.

2. A method for approving electronic payment in an electronic shopping  
5 mall with the use of a purchaser mobile terminal, conducted by a mobile communication service provider server that operates a mobile communication subscriber database and a payment approving server that is associated with an electronic shopping mall server through a communication network and supports WAP service, the method comprising:

(a) receiving product transaction information including product information and  
10 price information of a product to be purchased together with a mobile terminal number of the purchaser from a purchaser terminal that accesses the electronic shopping mall server;

(b) transmitting SMS including URL callback for linking WAP access of the  
payment approving server to the purchaser mobile terminal through the mobile  
15 communication service provider server;

(c) receiving a purchaser-identifying authentication code from the purchaser  
mobile terminal under the condition that a mobile terminal number transmitted in  
connection to WAP is identical to the mobile terminal number received in the electronic  
shopping mall server when the purchaser mobile terminal accesses WAP with the use of  
20 the URL callback;

(d) requesting payment certification with transmitting payment certification  
information including the mobile terminal number and the purchaser-identifying  
authentication code to the mobile communication service provider server, and then

waiting for a response; and

(e) approving the payment when the mobile communication service provider server transmits a certification success code as a result of inquiring the mobile communication subscriber database with the use of the payment certification  
5 information.

3. The method for approving electronic payment according to claim 1 or 2,  
wherein the purchaser-identifying authentication code is a resident registration number of the purchaser or a secret number registered to the mobile communication  
10 service provider server by the purchaser.

4. The method for approving electronic payment according to claim 1,  
wherein, in the step (c), the certification success code is transmitted under the conditions that:  
15 as a result of inquiring the mobile communication subscriber database by the mobile communication service provider server, it is determined that the mobile terminal number is recorded in the mobile communication subscriber database and a mobile communication charge of the purchaser is not delayed.

20 5. The method for approving electronic payment according to claim 1,  
wherein, in the step (c), the certification success code is transmitted under the conditions that:  
as a result of inquiring the mobile communication subscriber database by the

mobile communication service provider server, it is determined that the mobile terminal number is recorded in the mobile communication subscriber database, a mobile communication charge of the purchaser is not delayed, and the purchaser mobile terminal is not terminated or suspended.

5

6. The method for approving electronic payment according to claim 1, wherein, in the step (c), the certification success code is transmitted under the conditions that:

as a result of inquiring the mobile communication subscriber database by the  
10 mobile communication service provider server, it is determined that the mobile terminal number is recorded in the mobile communication subscriber database, a mobile communication charge of the purchaser is not delayed, the purchaser mobile terminal is not terminated or suspended, and the purchaser-identifying authentication code input  
15 recorded in the mobile communication subscriber database.

7. The method for approving electronic payment according to any of claims 4 to 6,

wherein the mobile communication subscriber database stores a predetermined  
20 payment limit capable of being settled by the mobile terminal and a total payment accumulated until now,

wherein, in the step (b), the price information is further transmitted to the mobile communication service provider server, and

wherein, in the step (c), the certification success code is transmitted under the additional condition that as a result of inquiring the mobile communication subscriber database by the mobile communication service provider server, it is determined that a sum of the accumulated total payment and the price is not exceeding the payment limit.

5

8. The method for approving electronic payment according to claim 1, wherein, in the step (d), the access to WAP is conducted by means of manipulation of a call button provided on the purchaser mobile terminal.

10

9. The method for approving electronic payment according to claim 1, wherein, in the step (a), a member store code of the electronic shopping mall server is further received from the purchaser terminal,

15

wherein, after the step (d), the method further comprises the step of storing a mobile terminal number of the payment-approved mobile terminal, a payment-approved price, a payment-approved product information, a member store code of the electronic shopping mall server and a payment approval date in a payment approval database.

10. The method for approving electronic payment according to claim 1, further comprising the steps of, after the step (d):

20

transmitting a payment approval code to the electronic shopping mall server; and storing a payment-approved price, a payment-approved product information and a payment approval date in a selling information database by the electronic shopping mall server under the condition that the payment approving code is received.

11. The method for approving electronic payment according to claim 2,  
wherein, in the step (e), the certification success code is transmitted under the  
conditions that:

5 as a result of inquiring the mobile communication subscriber database by the  
mobile communication service provider server, it is determined that the mobile terminal  
number is recorded in the mobile communication subscriber database and a mobile  
communication charge of the purchaser is not delayed.

10 12. The method for approving electronic payment according to claim 2,  
wherein, in the step (e), the certification success code is transmitted under the  
conditions that:

as a result of inquiring the mobile communication subscriber database by the  
mobile communication service provider server, it is determined that the mobile terminal  
15 number is recorded in the mobile communication subscriber database, a mobile  
communication charge of the purchaser is not delayed, and the purchaser mobile  
terminal is not terminated or suspended.

13. The method for approving electronic payment according to claim 2,  
20 wherein, in the step (e), the certification success code is transmitted under the  
conditions that:

as a result of inquiring the mobile communication subscriber database by the  
mobile communication service provider server, it is determined that the mobile terminal

number is recorded in the mobile communication subscriber database, a mobile communication charge of the purchaser is not delayed, the purchaser mobile terminal is not terminated or suspended, and the purchaser-identifying authentication code input from the purchaser mobile terminal is identical to a purchaser-identifying authentication  
5 code recorded in the mobile communication subscriber database.

14. The method for approving electronic payment according to any of claims 11 to 13,

wherein the mobile communication subscriber database stores a predetermined  
10 payment limit capable of being settled by the mobile terminal and a total payment accumulated until now,

wherein, in the step (d), the price information is further transmitted to the mobile communication service provider server, and

wherein, in the step (e), the certification success code is transmitted under the  
15 additional condition that as a result of inquiring the mobile communication subscriber database by the mobile communication service provider server, it is determined that a sum of the accumulated total payment and the price is not exceeding the payment limit.

15. The method for approving electronic payment according to claim 2,  
20 wherein, in the step (c), the access to WAP is conducted by means of manipulation of a call button provided on the purchaser mobile terminal.

16. The method for approving electronic payment according to claim 2,

wherein, in the step (a), a member store code of the electronic shopping mall server is further received from the purchaser terminal,

wherein, after the step (e), the method further comprises the step of storing a mobile terminal number of the payment-approved mobile terminal, a payment-approved price, a payment-approved product information, a member store code of the electronic shopping mall server and a payment approval date in a payment approval database.

17. The method for approving electronic payment according to claim 2, further comprising the steps of, after the step (e):

10 transmitting a payment approval code to the electronic shopping mall server; and  
storing a payment-approved price, a payment-approved product information and a payment approval date in a selling information database by the electronic shopping mall server under the condition that the payment approving code is received.

15 18. A system for approving electronic payment using SMS including URL callback, which includes a payment approving server for receiving a request for electronic payment from a purchaser terminal that accesses an electronic shopping mall server and then approving the electronic payment in association with a mobile communication service provider server that operates a mobile communication  
20 subscriber database, and also supporting WAP service, wherein the payment approving server executes:

receiving product transaction information including product information and price information of a product to be purchased together with a mobile terminal number



of the purchaser and an authentication code for identifying the purchaser from a purchaser terminal that accesses the electronic shopping mall server;

requesting payment certification with transmitting payment certification information including the mobile terminal number and the purchaser-identifying authentication code to the mobile communication service provider server, and then  
5 waiting for a response;

transmitting SMS including URL callback for linking WAP access of the payment approving server to the purchaser mobile terminal through the mobile communication service provider server when the mobile communication service  
10 provider server transmits a certification success code as a result of inquiring the mobile communication subscriber database with the use of the payment certification information; and

approving the payment under the condition that a mobile terminal transmitted in connection to WAP is identical to the mobile terminal number received in the electronic  
15 shopping mall server when the purchaser mobile terminal accesses WAP with the use of the URL callback.

19. A system for approving electronic payment using SMS including URL callback, which includes a payment approving server for receiving a request for  
20 electronic payment from a purchaser terminal that accesses an electronic shopping mall server and then approving the electronic payment in association with a mobile communication service provider server that operates a mobile communication subscriber database, and also supporting WAP service, wherein the payment approving

server executes:

receiving product transaction information including product information and price information of a product to be purchased together with a mobile terminal number of the purchaser from a purchaser terminal that accesses the electronic shopping mall  
5 server;

transmitting SMS including URL callback for linking WAP access of the payment approving server to the purchaser mobile terminal through the mobile communication service provider server;

receiving a purchaser-identifying authentication code from the purchaser mobile  
10 terminal under the condition that a mobile terminal number transmitted in connection to WAP is identical to the mobile terminal number received in the electronic shopping mall server when the purchaser mobile terminal accesses WAP with the use of the URL callback;

requesting payment certification with transmitting payment certification  
15 information including the mobile terminal number and the purchaser-identifying authentication code to the mobile communication service provider server, and then waiting for a response; and

approving the payment when the mobile communication service provider server transmits a certification success code as a result of inquiring the mobile communication  
20 subscriber database with the use of the payment certification information.